

Amendments to the Claims

The listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of claims

Claim 1: (amended) A handheld portable 2-way secure purchasing aid logistics appliance (PAL), comprising:

an optical reader subsystem and optical scan assembly capable of scanning high density bar codes into said PAL as scanned information, said optical reader subsystem and optical scan assembly capable of extracting from said scanned information numerical codes related to a web page representation;

encrypted random access memory (RAM) capable of storing data including encryption keys, financial data, and PAL owner name, said encrypted RAM having secure and disabled modes;

voice analog circuitry having a speaker and a microphone;

means for inputting information;

a central processor coupled to said an optical reader subsystem and optical scan assembly, said encrypted RAM, and said voice analog circuitry means for inputting information to generate a shopping list, wherein said central processor includes application software to maintain a budget and to perform finance computations and to track financial accounts;

a secure trusted monitor program executable by said central processor, said secure trusted monitor program capable of storing specific voice samples for biometric voice recognition and session parameters from a previous use;

a secure memory coupled to said central processor to safeguard personal and financial information;

a decoder capable of decoding the numerical codes according to merchant-specific rules and providing the numerical codes to a parser that creates web page software to build said web page;

a browser capable of receiving said web page software and creating a display from said web page software;

a magnetic stripe reader coupled to said central processor and capable of receiving financial data;

smart card reader coupled to said central processor and capable of receiving encryption keys;

a remote ear piece coupled to said central processor and capable of providing output data;

a front panel including keys, switches and indicators coupled to said central processor and capable of 2-way communication;

a micro video display controller having a micro video display coupled to said central processor and capable of providing 2-way communications;

a high-resolution touch screen display having a touch screen interface controller coupled to said central processor and capable of receiving input data;

a weight-measuring device coupled to said central processor and capable of receiving input data; and

a radio link controller and radio subsystem capable of high-speed secure short-range communication coupled to said central processor and capable of 2-way communication;

wherein said central processor receives said input data, creates shopping lists from said numerical codes, and provides said shopping lists and said web page on said touch screen display for manipulation by the user through said front panel and said micro video display;

wherein said radio link controller and radio subsystem provide said shopping lists to a merchant.

~~means for outputting said shopping list, and said personal and said financial information;~~
~~and~~

~~a display to view said shopping list.~~

Claim 2: (previously presented) The portable 2-way secure purchasing aid logistics appliance according to claim 1 further comprising:

a plurality of antennas capable of enabling non-interfering and secure communications between the purchasing aid logistics appliance and a merchant's computer for a plurality of simultaneous signals, the merchant's computer capable of enabling each of said plurality of antennas independently based on the location of the purchasing aid logistics appliance with respect to said plurality of antennas,

wherein said means for inputting information is a radio receiver capable of receiving signals based on the location of said radio receiver with respect to said plurality of antennas, from a radio transmitter coupled to the merchant computer through said plurality of antennas, wherein the merchant computer transmits product information in response to a signal by said purchasing aid logistics appliance for product information.

Claim 3: (original) The portable 2-way secure purchasing aid logistics appliance according to claim 1 wherein said means for inputting information is an internet port, said internet port is connectable to a personal computer linked to a merchant web site, whereby the merchant web site downloads product information to said internet port in response to a signal by the personal computer for product information.

Claim 4: (currently amended) The portable 2-way secure purchasing aid logistics appliance according to claim 1 wherein said ~~means for inputting information is a bar code scanner, whereby said bar code scanner~~ optical reader subsystem and optical scan assembly scans print media bar codes having product information and generates bar code signals to said central processor for further processing.

Claim 5: (original) The portable 2-way secure purchasing aid logistics appliance according to claim 4 wherein said central processor compares said shopping list to said bar code signals to determine whether product is a new product to add to said shopping list or an existing product, whereby said central processor tracks the total cost of products scanned, the remaining products to be scanned, and the available funds remaining in the budget.

Claim 6: (original) The portable 2-way secure purchasing aid logistics appliance according to claim 4 wherein said central processor includes executable software to convert bar code signals into a web page to be displayed on said display.

Claim 7: (previously presented) The portable 2-way secure purchasing aid logistics appliance according to claim 6 wherein said executable software includes:

a decoder having at least one decode table, said decoder capable of interpreting, according to the at least one decode table, a bar code capable of representing a display in one of a plurality of computer languages, said decoder capable of providing parsing information from the interpreted bar code;

a parser capable of creating display executable code to build the display from said parsing information; and

a display browser capable of creating a web page from said display executable code.

Claim 8: (cancelled)

Claim 9: (cancelled)

Claim 10: (cancelled)

Claim 11: (cancelled)

Claim 12: (cancelled)

Claim 13: (cancelled)

Claim 14: (cancelled)

Claim 15: (cancelled)

Claim 16: (currently amended) The portable 2-way secure purchasing aid logistics appliance according to claim [[15]]1 wherein said radio link controller and radio subsystem means for

~~outputting~~ controls signal strength to communicate with a merchant sales register to minimize the possibility of transmission interception during a purchase transaction.

Claim 17: (currently amended) The portable 2-way secure purchasing aid logistics appliance according to claim ~~[[10]]~~₁ wherein said central processor further includes executable software to compare smart card information and user personal identification number to data stored in a smart card and said central processor to prevent unauthorized use of said portable 2-way secure purchasing aid logistics appliance, wherein said data stored on the smart card is read from a smart card reader integrated with said purchasing aid logistics appliance.

Claim 18: (currently amended) A method for using a purchasing aid logistics appliance, comprising the steps of:

downloading product data from a web site;

creating a shopping list from the product data;

monitoring beacon channels;

receiving into the purchasing aid logistics appliance a channel indication of a first wireless channel from the beacon channels;

determining a location of the purchasing aid logistics appliance when the purchasing aid logistics appliance is in the doorway of a merchant facility;

causing the purchasing aid logistics appliance to wirelessly ~~[[uploading]]~~ upload the shopping list to a merchant computer from the purchasing aid logistics appliance through the first wireless channel when the purchasing aid logistics appliance is at the location ~~while traversing a doorway into a merchant facility~~, the first wireless channel directly connecting the merchant computer with the purchasing aid logistics appliance;

receiving product data into the purchasing aid logistics appliance from the merchant computer through the first wireless channel while traversing a doorway into the merchant facility;

scanning a product bar code when a product is removed from the shelf and placed in a shopping cart for purchase;

creating a shopping cart file when the product is scanned; and

wirelessly transmitting the shopping cart file to the merchant computer to checkout.

Claim 19: (cancelled)

Claim 20: (cancelled)

Claim 21: (cancelled)

Claim 22: (cancelled)

Claim 23: (cancelled)

Claim 24: (currently amended) The method as defined in claim [[22]] 18 further comprising the steps of:

downloading at least one price associated with the product data;

verifying the validity of the at least one price; and

synchronizing appliance financial transaction logs with financial institution financial transaction logs.

Claim 25: (cancelled)

Claim 26: (cancelled)

Claim 27: (cancelled)

Claim 28: (currently amended) [[A]] The portable 2-way secure purchasing aid logistics appliance of claim 1 further[[,]] comprising:

~~means for inputting information;~~

~~a central processor coupled to said means for inputting information to generate a shopping list, wherein said central processor includes application software to maintain a budget and to track financial accounts;~~

means for modifying memory address retrieval coupled to said central processor to safeguard personal and financial information, said means for modifying memory address retrieval requiring an authentication procedure to reverse the modification; and

~~means for outputting said shopping list, and said personal and said financial information.~~

Claim 29: (cancelled)

Claim 30: (cancelled)

Claim 31: (previously presented) The portable 2-way secure purchasing aid logistics appliance according to claim 1 wherein said secure memory comprises:

an address decoder;

means for misaligning the address of a memory location by a random number incorporated into said address decoder; and

means for accessing said memory location by said address decoder by using said random number when a secure address range is accessed in secure mode.

Claim 32: (new) A method for procurement planning comprising the steps of:

receiving a flyer;

scanning, into a handheld device, numerical codes including a merchant-specific code from the flyer that includes merchant information associated with a merchant;

receiving an indication of a scanning status of said step of scanning;

adding a product code as a list item to a list containing the list items by scanning the product code into the handheld device, wherein the product code includes a product description, unit, price, and programming information about the product;

adding or removing the list items from the list using keypad functions enabled by front panel keys;

adding the list items from a main memory based on previous purchases;

accessing a merchant web site associated with the merchant-specific code through a radio link controller via an optical scan assembly, the radio link controller enabling the handheld device to communicate via an Internet connection;

adding the list items from the merchant web site associated with the merchant through the Internet connection;

providing a screen of information on the handheld device relevant to the list items;

creating a browser frame on the handheld device according to visual formatting instructions and product information in the product code;

determining, by a wireless means, if the handheld device has reached a threshold of a merchant facility associated with the merchant code;

wirelessly altering the behavior of the handheld device at the point when the handheld device reaches the threshold of the merchant facility;

sending the list to the merchant web site through the Internet connection wirelessly at the threshold of the merchant facility;

performing a multi-step process to access secure memory including inserting a smart card into a smart card reader of the handheld device, accessing the personal identification number on the smart card, receiving a user entry including a candidate personal identification number, verifying the personal identification number with the candidate personal identification number, comparing a secure data hash on the handheld device with a hash stored on the smart card, and unlocking the secure memory if the personal identification number and the secure data hash verify;

creating a new secure data hash; and

purchasing items wirelessly using information from secure memory.